

## U.S. Nuclear Regulatory Commission Report to the Secretary of Energy Regarding the Metering of Energy and Water in Federal Buildings

### Background:

As required by 42 of the United States Code 8253(e)(1), energy and water use must be metered in all Federal buildings by October 1, 2022.

The U.S. Nuclear Regulatory Commission (NRC) occupies a total of nine buildings in six geographical locations. The agency does not own or lease any real property; all of its occupancies are through occupancy agreements with the General Services Administration (GSA). The NRC has delegated authority through GSA to operate and maintain two of its headquarters buildings located in Rockville, Maryland, and has done so since their construction in the early 1990's. One of the two buildings, One White Flint North, located at 11555 Rockville Pike, is owned by GSA and the other building, Two White Flint North, located at 11545 Rockville Pike, is a leased by GSA on NRC's behalf. The two buildings are inter-connected. This report is limited to the two buildings the NRC operates and maintains.

### Status:

Both buildings have been separately metered for electric, water, and natural gas since their construction. Currently, the use of natural gas is minimal as it is limited to two commercial water heaters. NRC's Office of Administration's Director of the Division of Facilities and Maintenance is responsible for operational maintenance of the buildings, including metering requirements. The NRC has successfully and progressively made significant investments over the last 15 years to reduce the energy consumption and water usage in both buildings. NRC has replaced the old metering equipment with newer high efficiency designs and added additional metering technology such as the installation of sub-meters for the cooling towers, allowing staff to closely monitor water usage associated with the heating, ventilation, and air conditioning system. NRC has also installed sub-meters monitoring water usage associated with irrigation, allowing the agency to monitor usage, detect leaks within the irrigation system, as well as broken sprinkler heads and system malfunctions.

The resulting reduction of energy and water usage is summarized below:

#### *Fiscal Year (FY) 2021 Energy Intensity Progress (Btu/GSF)*

- 60 percent reduction from FY 2012
- 6.7 percent reduction from FY 2020
- Planned reductions of 2 percent from FY 2021 to FY 2022

#### *Water Intensity Progress (gal/GSF)*

- 56.7 percent reduction from FY 2007
- 7 percent reduction from FY 2020

### Summary:

The NRC currently meets the required energy and water metering standards for the buildings under its control, therefore an implementation plan is unnecessary. The NRC will continue to assess its current metering infrastructure and evaluate the feasibility of installing additional advanced metering devices, to the extent practical, for the purpose of efficient use of water and reduction in associated costs in its facilities.

Enclosure